

**FIG. 1**

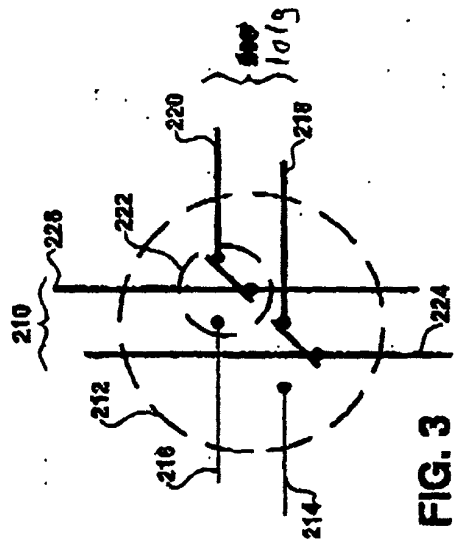


FIG. 3



FIG. 4

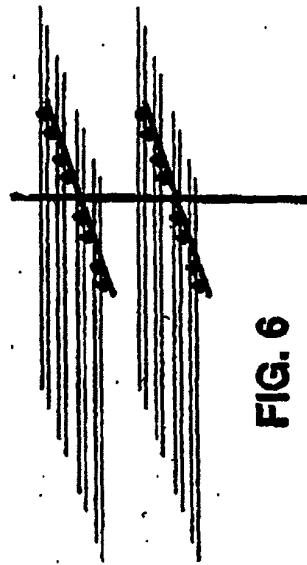


FIG. 6

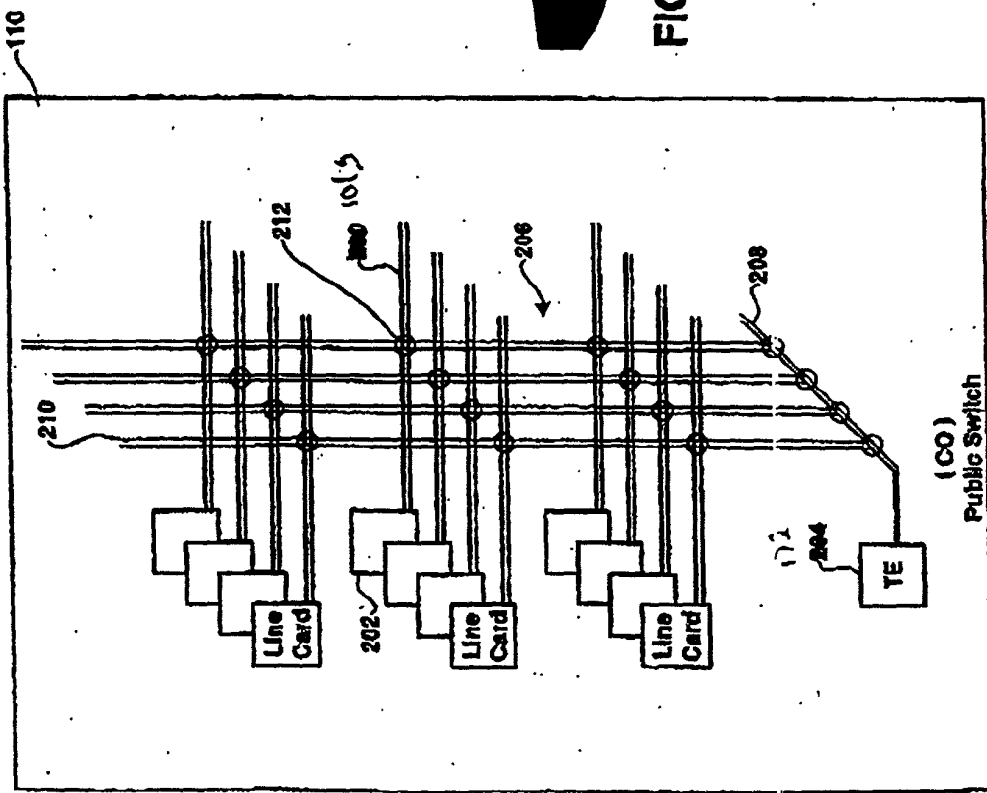
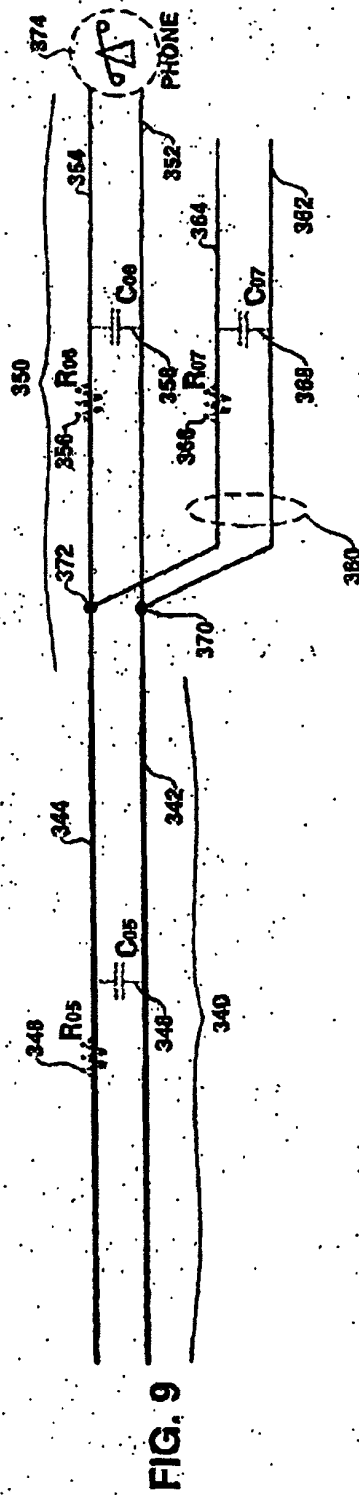
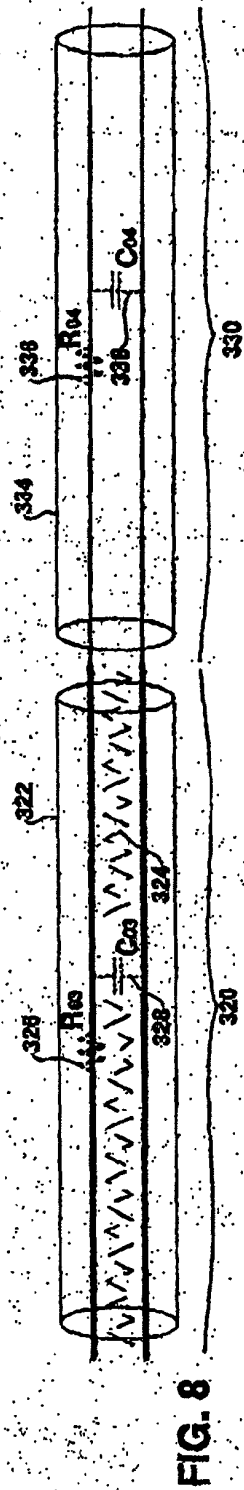
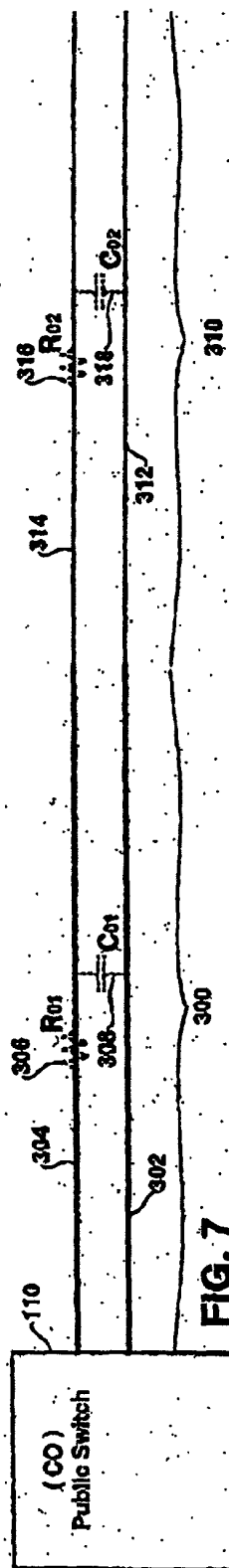
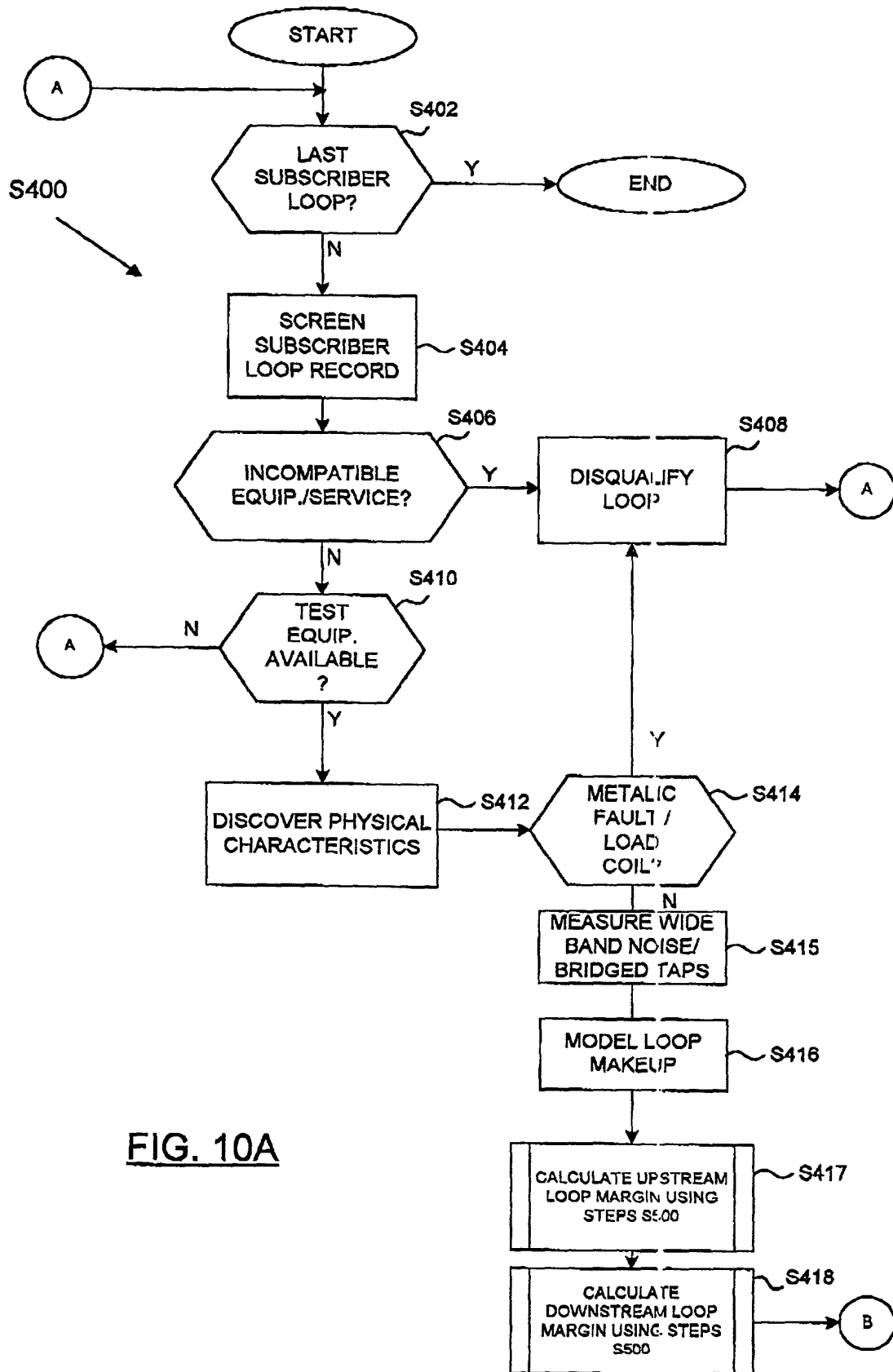
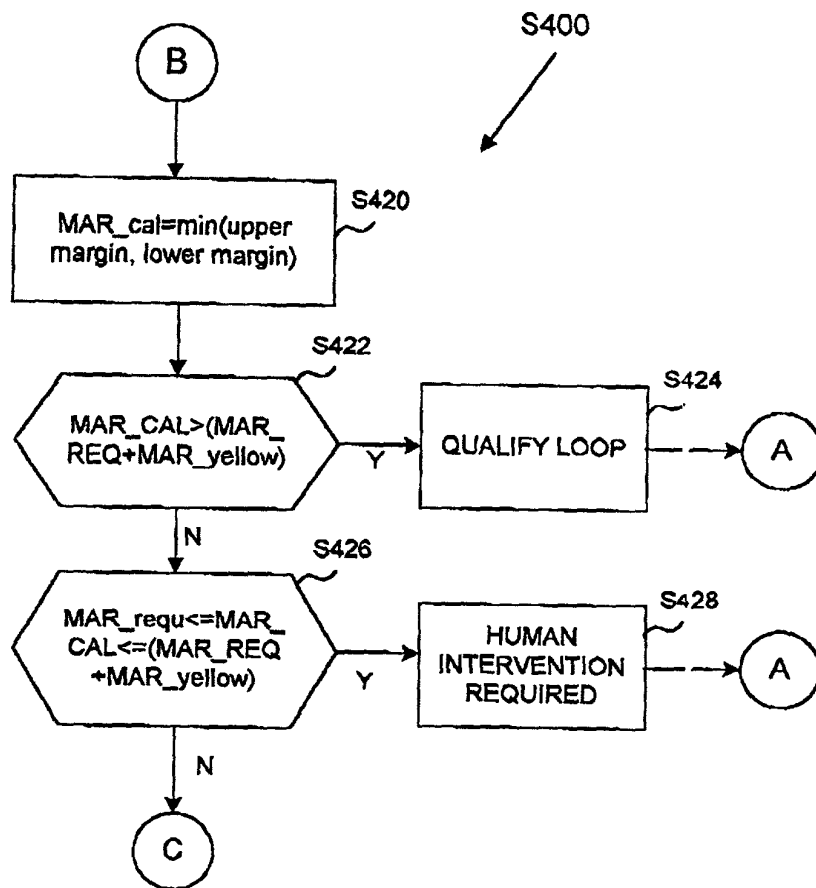


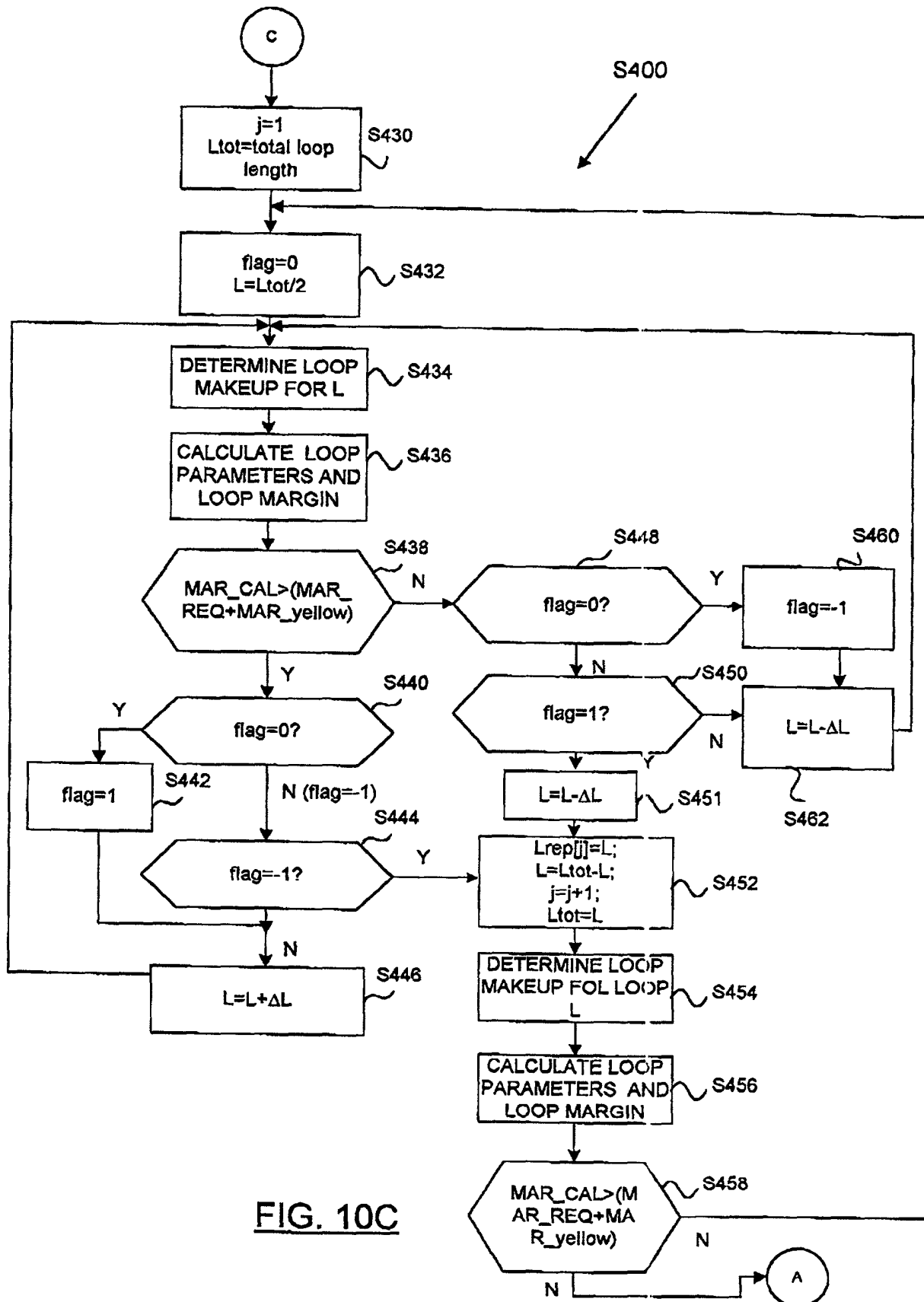
FIG. 2

FIG. 2 is a schematic diagram of a switch system. The system includes a plurality of line cards (202) connected to a switch matrix (206). The switch matrix is connected to a public switch (CO) via a transmission line (TE). The switch matrix includes a plurality of switch points (208) and a control line (1015). The switch matrix is also connected to a control line (110).





FIG. 10B



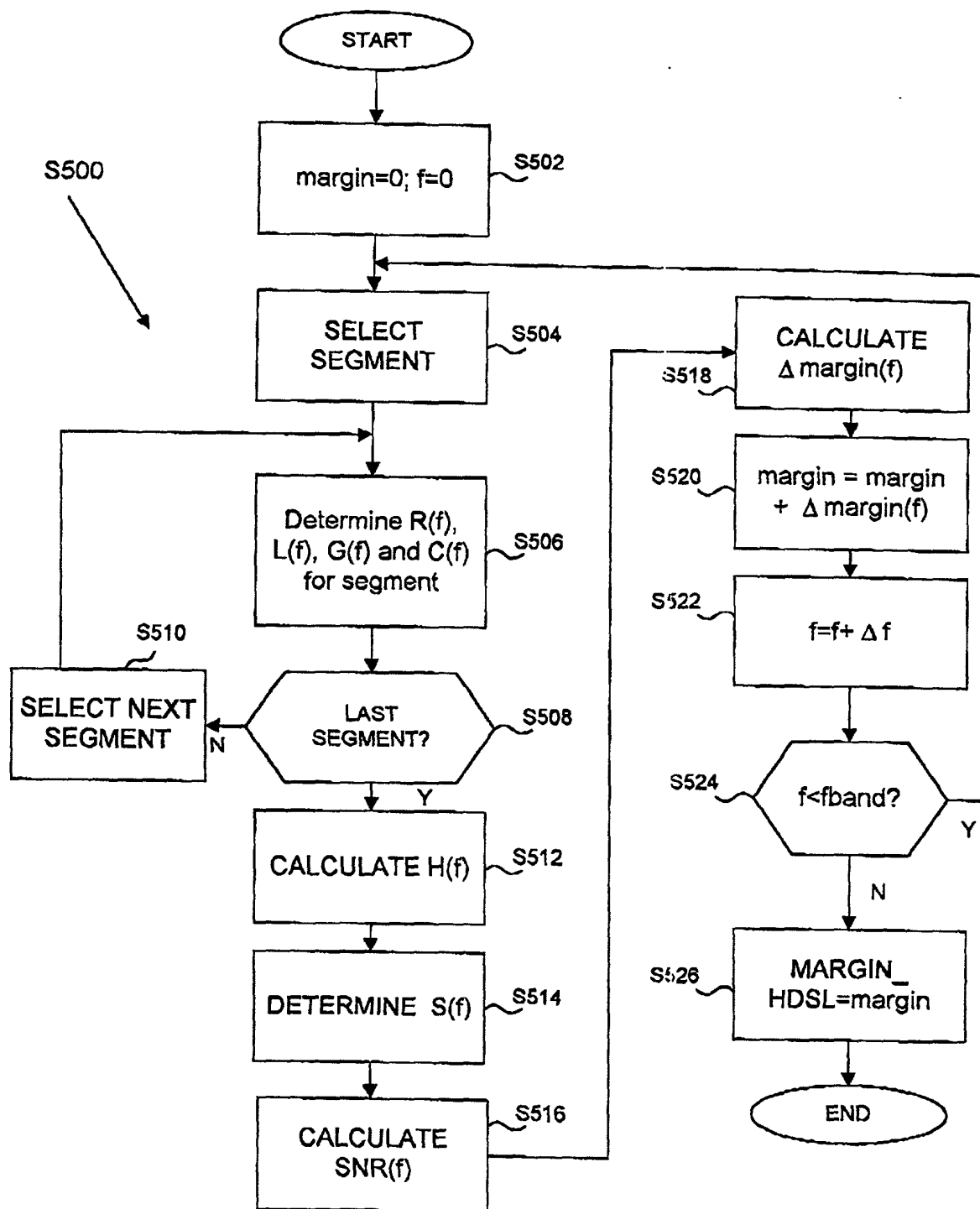


FIG. 11

**PSD mask definition for upstream transmission from SM class 4 TU.**

Frequency (kHz)	PSD (dBm/Hz)	Frequency (kHz)	PSD (dBm/Hz)	Frequency (kHz)	PSD (dBm/Hz)
≤ 1	-54.2	220	-34.4	555	-102.6
2	-42.1	255	-34.4	800	-105.6
10	-37.8	276	-41.1	1400	-108
175	-37.8	300	-77.6	≥ 2000	-108

**PSD mask for upstream transmission from SM class 4 TU-R**

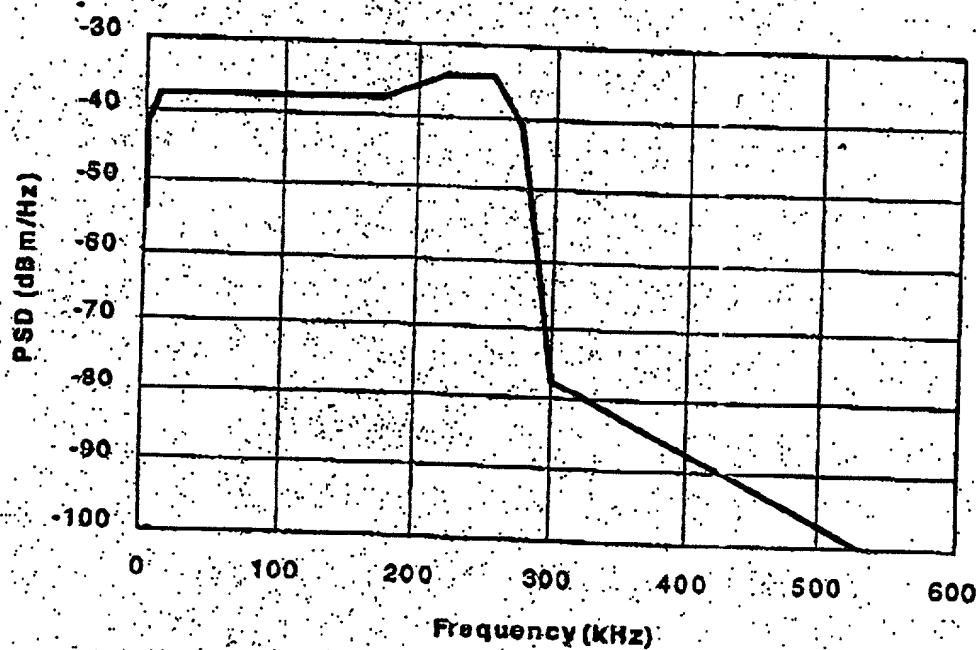


FIG. 12



### PSD mask definition for downstream transmission from SM class 4

Frequency (kHz)	PSD (dBm/Hz)	Frequency (kHz)	PSD (dBm/Hz)	Frequency (kHz)	PSD (dBm/Hz)
51	-54.2	280	-35.7	1000	-89.2
2	-42.2	375	-35.7	2000	-99.7
12	-39.2	400	-40.2	>3000	-108
180	-39.2	440	-68.2		
236	-46.2	600	-76.2		

### PSD mask for downstream transmission from SM class 4 TU-C

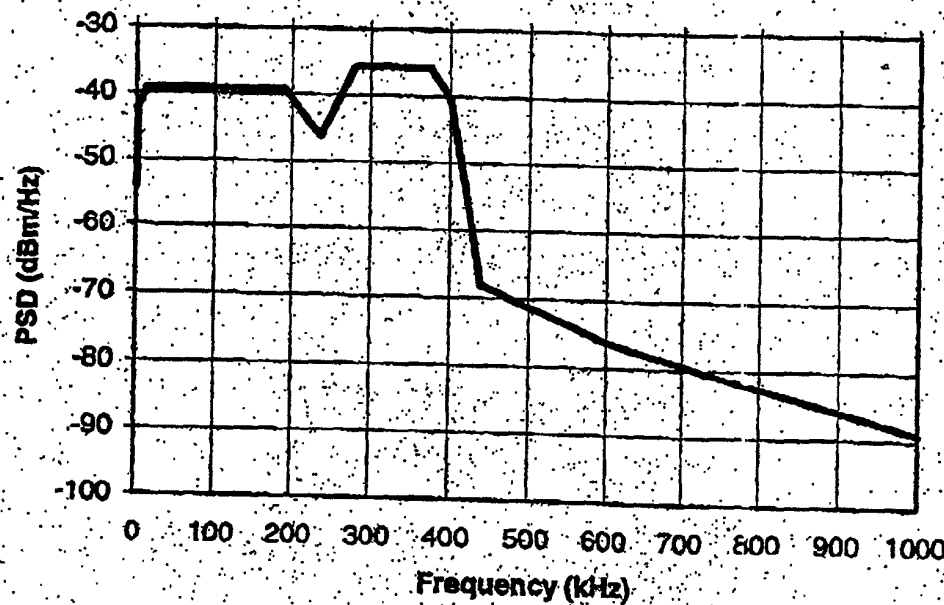


FIG. 13